PHD SCHOLARSHIP

The School of Civil Engineering at The University of Queensland (Brisbane, Australia) is offering a PhD scholarship for a motivated student to contribute to research being undertaken within the Transport Research Group. The scholarships will be for three (3) years with approved extensions and valued at $27,082 per year (indexed annually). Top-up scholarships and international student fee-waivers are also available to exceptional candidates.

PROJECT INFORMATION

Large-scale traffic control in the era of connected and autonomous vehicles (CAV)

The car of the future will be connected and autonomous. It will include automated driving capability and will be able to communicate with other vehicles and increasingly intelligent roadway infrastructure. Such capabilities will enable them to serve as components of a larger mobility network; peer-to-peer platforms, data centres and traffic management units. There is a great opportunity to integrate this emerging technology with innovative network operation schemes, enable cooperation between users in time and space (e.g., encouraging non-peak usage, route guidance) and enhance network capacity without investment in infrastructure. However, the implications and impacts of AVs on future of transport networks are not clear. This research will investigate the implications on (i) road space allocation (e.g., lane allocations), (ii) operational performance, and (iii) novel local and central traffic control strategies. This underlines the vast impact of CAVs on the future of transport networks and emphasizes how they can improve accessibility and mobility in cities.

QUALIFICATIONS

Candidates must hold a relevant undergraduate or Master’s degree in Civil Engineering, Electrical Engineering, Computer Science, Operations Research, Applied Mathematics and Physics or other related field. Candidates with skills or interest in traffic modelling, control theory, big data, optimization, machine learning and programming are strongly encouraged to apply.

HOW TO APPLY

Interested candidates should submit their scholarship application on the Application or school-based PhD or MPhil scholarship form, together with your supporting documents on the RHD online application system.

Details on the application for admission and scholarship process can be found at http://www.civil.uq.edu.au/HDR-application-apply.

For further details on the scholarship project, please contact Dr. Mehmet Yildirimoglu at m.yildirimoglu@uq.edu.au.

Submission due by 26/02/18